REMARKS

Since the proposed Amendment filed on November 27, 2006, was "not entered", Applicant reverts to the claims as they appeared at the time of the **final** Action of August 7, 2006, i.e., to the claims appearing in the Amendment filed on May 23, 2006.

Applicant again respectfully requests the Examiner to reconsider and withdraw the objection to claim 1 in view of the above amendment thereof removing the "such as" clause to which the Examiner objected.

In the **final** Action of August 7, 2006, Examiner Mattis issued the following four new prior art rejections under 35 U.S.C. §103 which rely on a basic combination of Gudat '609/Yuan '893 and Dillon '795 **(newly cited)**, and also with Cable '895 (for claims 18, 26, 29 and 30) and Mai '310 (**newly cited**) for claim 25, and Hakulinen (WO '413) for claims 27 and 28:

1. Claims 1-3, 8, and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gudat et al. (U.S. Pat. **6,771,609**) in view of Yuan et al. (U.S. Pat. **6,310,893**) and Dillon et al (U.S. Pat. 5,652,795);

2. Claims 18, 26, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gudat et al. in view of Yuan et al. and Dillon et al. as applied to claims 1-3, 8 and 20-24 above, and further in view of Cable et al. (U.S. Pat. 6,570,895);

3. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gudat et al. in view of Yuan et al. and Dillon et al. as applied to claims 1-3, 8, and 20-24 above, and in further view of Mai et al. (U.S. Publication US 2002/0001310 A1); and

4. Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gudat et al. in view of Yuan et al. Dillon et al. and Cable et al. as applied to claims 18, 26, and 29-30 above, and in further view of Hakulinen (WO 97/20413 as cited in the Applicant's IDS).

Applicant respectfully **traverses** these rejections. (Applicant amends the language of claims 1, 18, 29 and 30 to change "identifier/identifiers" to "label/labels" to maintain consistency of language with respect to the previously recited "label field".)

Even though these four new rejections under 35 U.S.C. § 103(a) all rely on the **newly cited** Dillon '795, the Examiner's characterizations of the previously cited references (Gudat, Yuan, Cable and Hakulinen) appear to be substantially the same as in the previous Office Action of January 25, 2006; therefore, Applicant expressly incorporates herein by reference Applicant's previous "Remarks" and analyses, regarding these previously cited references, in the Amendment filed May 23, 2006.

In addition, Applicant respectfully requests Examiner Mattis to consider the following further rebuttal arguments which address the four rejections under 35 U.S.C. § 103(a) relying on the **newly cited** Dillon '795.

In accordance with independent parent claim 1, a "label" located in a "label" field of the addressing header of a data packet has the following **features** (to which the Examiner **specifically refers** in the Advisory Action):

a) is characteristic of one sub-network selected in the group consisting of IP logical sub-networks, private networks and multi-recipient groups, and to which a target terminal station to which the packet is addressed belongs,

b) is characteristic of at least one spot associated with the label and including the spot in which the satellite terminal or ground station associated with the target terminal station is located, and

c) serves to determine whether the data packet shall be processed or not by the satellite terminal or ground station, which has a list of such labels used as a reception filter.

As evidenced by the Examiner's comments in the Advisory Action, the references of primary interest are Yuan '893 and Dillon '795 (newly cited).

Gudat '609 remains the primary reference in all four statutory rejections, and rather than repeat them, Applicant incorporates herein by reference Applicant's previous analysis of this reference, and also continues to agree with the Examiner's several statements of Gudat et al "does not disclose…".

Claim 1 is now further amended by requiring a network supporting virtual sub-networks. The feature "such as…multi-recipient groups" is deleted. A "virtual sub-network…being allocated one or more labels" is supported by specification page 9, lines 7-8.

New claim 31 is based on original claim 4 and amended claim 1.

The Examiner states, in the Advisory Action at page 3, that Yuan discloses "a multi-recipient group" comprising "all the terminals in communication with a satellite relay". In that sense, the "multi-recipient group" disclosed by Yuan is a physical sub-network, i.e., a sub-network that is defined by a physical relation to a specific piece of equipment in the network, i.e., a single satellite relay.

The group of terminals in communication with a single satellite relay, as cited by the Examiner, is a very specific instance of a multi-recipient group that does not have much practical utility. Especially, this physically defined "multi-recipient group" precludes the distribution of a data stream to two distant terminals located in the coverage areas of two different satellites, because those would not belong to the same group.

The invention of claim 1 (and new claim 31) refers to a "network supporting virtual sub-networks". In the art, a "virtual sub-network" refers to a sub-network where the connectivity between users of the sub-network is logical rather than physical., i.e., connectivity is achieved through addressing. Therefore, a "virtual sub-network" is much more flexible than a physical sub-network. Especially, in accordance with claim 1, a virtual sub-network is "allocated one or more labels" and a terminal that belongs to the virtual sub-network has an "authorized" label that matches the "allocated" labels.

Therefore, claim 1 imposes no restriction regarding the physical locations and physical connectivity of the terminals belonging to a virtual sub-network. Two distant terminals located in the coverage areas of two different satellites can belong to a same virtual sub-network. Further, since a label is characteristic of one or more satellite spots, those two distant terminals can be addressed by a single label or by different labels.

Further, Applicant respectfully **disagrees** with the Examiner's argument that the person skilled in the art would combine the filtering function disclosed by Dillon et al with the beam locator field disclosed by Yuan. The filtering function disclosed by Dillon is based on an address identifying a broadcasted data stream, **not** on a destination address. Since Dillon deals

with broadcast satellite systems, a given data stream does not have an address that depends on the subscriber's location. It has a single address that all subscribers should possess in their Access Table in order to decrypt the data stream, regardless of their locations.

The Examiner's arguments show only that the person skilled in the art might find a motivation to use both the filtering function, disclosed by Dillon, and the routing function disclosed by Yuan. Under this assumption, given the fact that Dillon's filtering function is based on a data stream address that remains unique for a given data stream throughout all nodes of the network, and that Yuan's routing function is based on a beam locator field that varies with the location of the destination node, one of ordinary skill in the art would only **add** the use of a beam locator field as taught by Yuan to the use of an address field as taught by Dillon. One of ordinary skill in the art would clearly have been dissuaded from combining these references to obtain a label field having the above "features" b) and c).

Thus, Applicant respectfully submits that Applicant has rebutted/overcome the rejection of the independent parent claim 1 based on unpatentability (obviousness) over the basic Gudat/Yuan/Dillon combination. Because this combination does not teach or even suggest all of the limitations of the amended claim 1, Applicant respectfully submits that claim 1, and all of the claims dependent thereon, are also nonobvious and, therefore, patentable. The same applies to the new claim 31 which contains limitations which are neither disclosed nor suggested by the Gudat/Yuan/Dillon combination. Because the deficiencies in this basic combination are not provided by the Cable, Mai (newly cited) and Hakulinen references, the subject matter of each of

these claims clearly would not have been obvious from the combinations of references applied by the Examiner.

In summary, then, Applicant respectfully submits that the pending claims 1-3, 8, 18 and 20-31 are allowable over the prior art; however, if for any reason the Examiner feels that the application is not now in condition for allowance, Applicant respectfully requests the Examiner to call the undersigned attorney to discuss any unresolved issues and to expedite the disposition of the application.

In this regard, it is hoped the Examiner would agree that Applicant's **disclosed** invention is patentable (nonobvious) over the prior art, and that the only possible remaining issue is whether the language of the claims defines the patentable difference between the claimed invention and the prior art applied by Examiner Mattis.

Applicant files concurrently herewith a Petition (with fee) for an Extension of Time of an additional two months (the second and third months). Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this application, and any required fee for such extension is to be charged to Deposit Account No. 19-4880. The Commissioner is also authorized to charge any additional fees under 37 C.F.R. § 1.16 and/or § 1.17

necessary to keep this application pending in the Patent and Trademark Office or credit any overpayment to said Deposit Account No. 19-4880.

Respectfully submitted,

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